

Patent Abstracts of Japan

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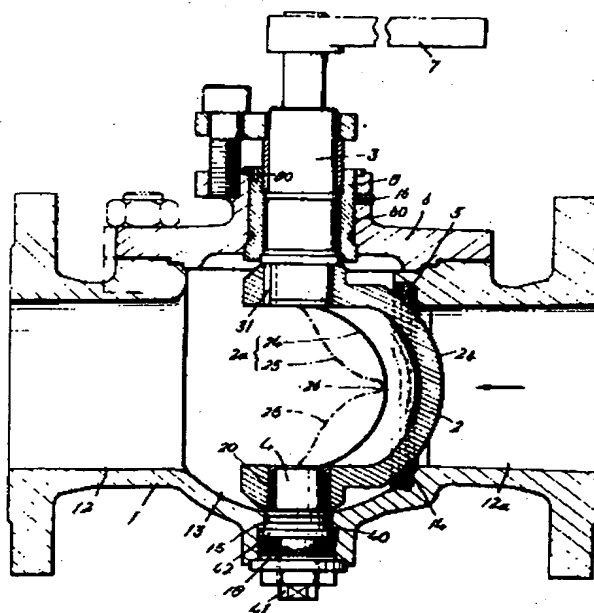
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TITLE : CONTROL DEVICE FOR SPHERICAL VALVE



ABSTRACT : PURPOSE: To provide a control device for a spherical valve by forming on the inner surface of a spherical portion of a valve body different shapes of projections having different flow rate control characteristics to be adapted for various purposes.

CONSTITUTION: A spherical valve body 2 is provided on the inner surface of its spherical portion 2b with a cross-sectionally arcuate projection 24 the ridge of which is parallel to the inner surface of the spherical portion 2b, and symmetrical projections 25 having a common end 26 in the central section of the spherical portion 2b and formed such as to have certain control characteristics. In order to obtain linear characteristics whereby the flow rate of a fluid is varied simply in proportion to the degree of opening of the valve, the projections 25 are outwardly curved. In order to obtain equal percentage characteristics whereby the ratio of increase in a flow rate becomes equal to the ratio of increase in the degree of opening of the valve, the projections 25 are inwardly swelled. When a fluid passage 12 is completely opened, the projection 24 is aligned with the surface of a wall having an opening on the downstream side of the fluid passage 12 so that a flow of a fluid on the downstream side of the fluid passage 12 is not limited or obstructed.

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